AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 2, line 19, and insert the following rewritten paragraph:

Accordingly, an object of the invention is to provide a double-beam interferometer and a method of adjusting a fixed mirror for the double-beam interferometer which can restore the interference state to or above a threshold where fine adjustment of ~~such a degree being capable of controlling~~ an interferometer can again be effective (hereinafter called as a rough adjustment).

Please replace the paragraph beginning at page 3, line 20, and insert the following rewritten paragraph:

In the adjusting method of the fixed mirror, the adjusting step may include: measuring amplitudes of the laser interference light beam while moving a posture of the fixed mirror until the amplitude becomes larger than a preset reference value; measuring amplitudes of the laser interference light beam while moving the posture of the fixed mirror to points on a circle around a point where the amplitude becomes ~~lager~~larger than the reference value as a center; setting a point having the largest amplitude among all the measured points on the circle as the center of the next circle; and repeating the measuring step of the amplitudes at the points on the circle and the setting step until the amplitude at the center of the circle becomes maximum among all the measured points on the circle.

Please replace the paragraph beginning at page 6, line 1, and insert the following rewritten paragraph:

A main interferometer includes an infrared source 1, a converging mirror 2, a collimator mirror 3, a beam splitter 4, a fixed mirror 5 and a movable mirror 6 etc. the main interferometer generates an infrared interference light beam for measuring spectrum. The infrared light beam emitted from the infrared source 1 is irradiated on the beam splitter 4 through the converging mirror 2 and the collimator mirror 3. The ~~bam~~beam splitter 4 splits the irradiated infrared light beam into two light beams directed to the fixed mirror 5 and the movable mirror 6, respectively. The light beams reflected from the fixed mirror 5 and the movable mirror 6 are returned to and composed at the beam splitter 4 and the composed beam is sent to an optical path directed to a parabolic mirror 10. In this case, since the movable mirror 6 moves reciprocally in the direction shown by an arrow M1 in Fig. 1, a difference of the optical path between the two light beams thus split changes periodically and the light beam directed to the parabolic mirror 10 from the beam splitter 4 becomes as an infrared interference light beam which amplitude changes over time. The light beam converged at the parabolic mirror 10 is irradiated on a sample 11. The light beam transmitted through (or reflected from) the sample 11 is converged at a photo detector 13 by an elliptical mirror 12.

Please replace the paragraph beginning at page 7, line 1, and insert the following rewritten paragraph:

A control interferometer includes a laser source 7, a first reflecting mirror 8, a second reflecting mirror 9, the beam splitter 4, the fixed mirror 5 and the movable mirror 6. The control interferometer generates a laser interference light beam for obtaining a signal for the laser interference light beam (fringe). The light beam

emitted from the laser source 7 is irradiated on the beam splitter 4 through the first reflecting mirror 8 and sent toward the parabolic mirror 10 as an interference light beam like the light beam from the infrared source 1. The laser interference light beam traveling as a light beam with a minute diameter is reflected by the second reflecting mirror 9 inserted in the optical path of the infrared interference light beam and is introduced into a photo detector 14. Actually, although there is provided ~~with~~ a means for further splitting the laser interference light beam and detecting the split light beams, the configuration thereof is omitted in Fig. 1.